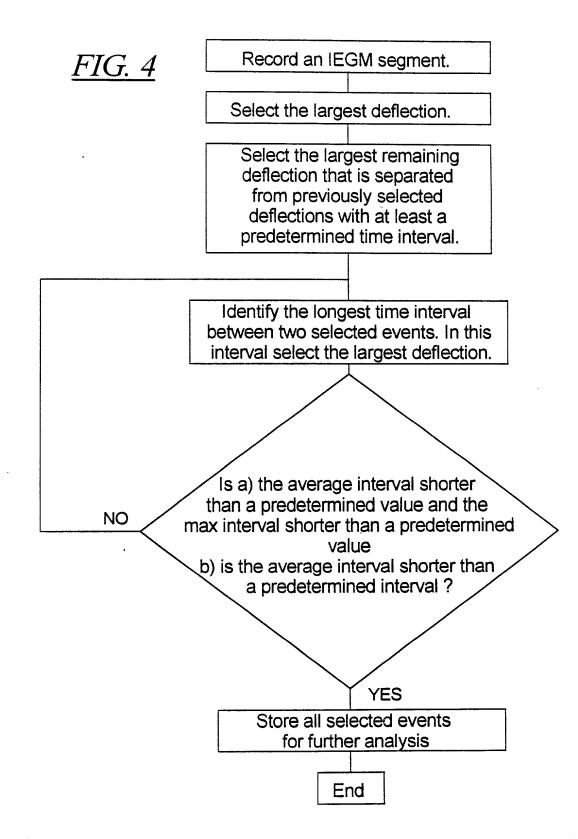


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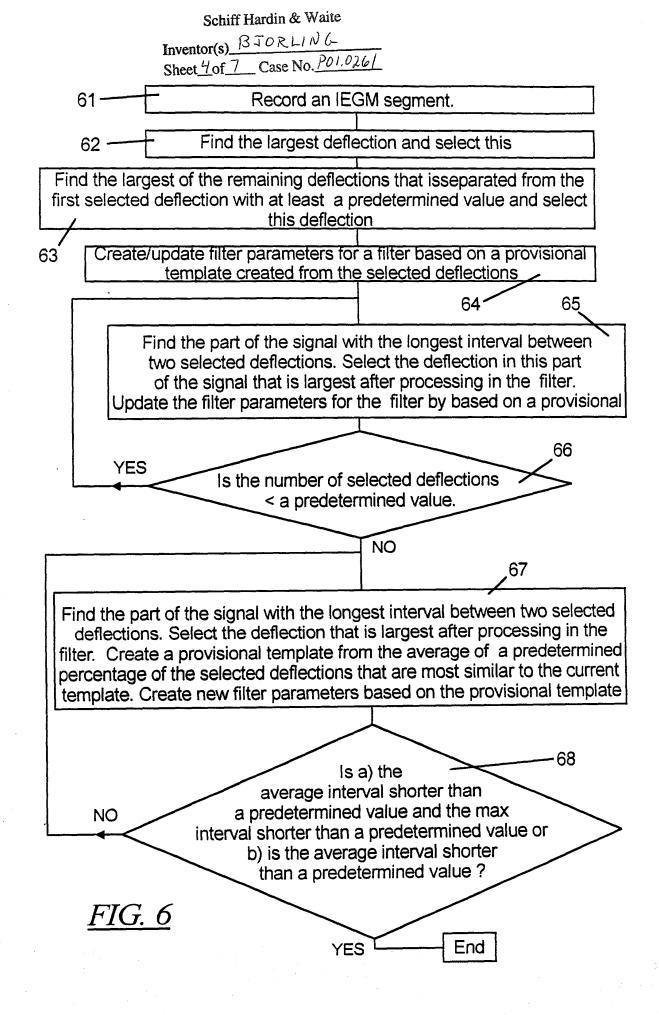
Inventor(s) BJORLING
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Sheet 3 of 7 Case No. 201.026/ 51-Record an IEGM segment. Find the largest deflection and select this. 52 Find the largest of the remaining deflections and select it if it is not closer than a predetermined 53 interval to a previously selected deflection. Create/update filter parameters for a filter based on a 54 provisional template created from the selected deflections. Find the largest of the non-selected deflections after processing the signal in the filter. Select this deflection 55 if it is separated with more than a predetermined interval from a previously selected deflection. Is the number of selected deflections < predetermined value. 56 57 Update filter parameters for the filter based on a provisional template created from the selected deflections Find the largest of the non-selected deflections that is separated with more than a predetermined time interval from previously selected deflections after filtering the signal through the filter. Select this deflection. 58 Was the amplitude of the last deflection NO selected less than a predetermined percentage of the largest deflection selected 59 YES FIG. 5 End

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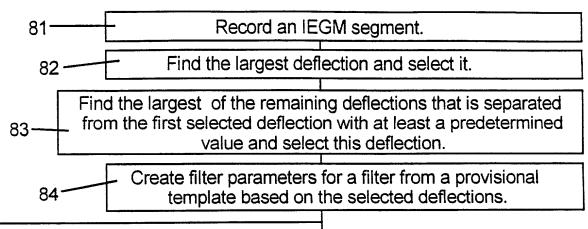
Inventor(s) BJORLING



## Inventor(s) BJORLING Sheet 5 of 7 Case No. P01.0261 Record an IEGM segment. 71 Find the largest deflection and select this. 72 Find the largest of the remaining deflections and select this if it is not closer than a predetermined interval to a previously selected deflection 74 Create/update filter parameters for a filter from a provisional template based on the selected deflections. Find the largest of the not selected deflections after processing the signal in the filter. Select this deflectionif it is separated with more than a predetermined interval from a previously selected deflection. Shift the selected deflection and search in an iterative procedure the amount of shift that gives the lowest value of the euclidian norm between the current template and the selected deflection 75 is the number of selected YES deflections a predetermined value 76 NO Update filter parameters for the filter based on 77. a provisional template based on selected deflections. Find the largest of the not selected deflections that is separated with more than a predetermined time interval from previously selected deflections after filtering the signal through the filter. Shift the selected deflection and search in an iterative procedure the amount of shift that gives the lowest value of the euclidian norm between the current provisional template and the selected deflection. 78 Was the amplitude of the last deflection selected less NO than a predetermined percentage the largest deflection selected 79 **FIG**. 7 End

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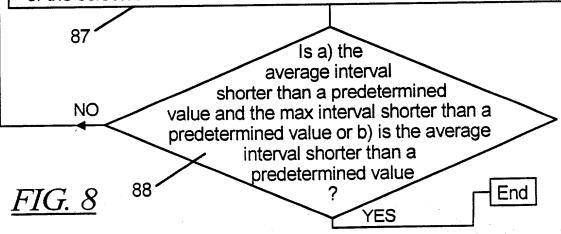
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Find the part of the signal with the longest interval between two selected deflections. Select the deflection in this part of the signal that is largest after processing in the filter. Shift the selected deflection and search in an iterative procedure the amount of shift that gives the lowest value of the Euclidian norm between the current provisional template and the selected deflection. Update the template for the creation of the parameters for the filter. Create the provisional template from the average of the selected deflections.

85 Is the number of selected deflections < a predetermined value ? NO

Find the part of the signal with the longest interval between two selected deflections. Select the deflection that is largest after processing in the filter. Shift the selected deflection and search in an iterative procedure the amount of shift that gives the lowest value of the euclidian norm between the current template and the selected deflection. Update the provisional template for creation of the filter parameters. Create the provisional template from the average of a predetermined percentage of the selected deflections that are most similar to the current template.



Inventor(s) BJORLING Sheet 7 of 7 Case No. P01.0261 91-Create a template as the average of all selected deflections. Search lowest value of the Euclidian distance between each deflection and the current template by shifting the deflection to the left or to the right in a predetermined range until the lowest value is found. 92 Create a new template as the average of all selected deflections after shifting. 93 FIG. 9 End *FIG. 10* 101 Select a first set of initial class centers. Assign each of the selected deflections to the class it is closest to. **102** Calculate new class centers based 103 on average of deflections in the respective. class. Assign each of the selected deflections to the class it is closest to. 104 105 Did any deflection change class 106 Classification ready.

End

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